## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : To Be Assigned
Applicant : Don J. DIAMOND
Filed : October 31, 2003

TC/A.U. : 1648

Examiner : Ali Reza Salimi

Docket No. : 1954-435 Customer No. : 06449

Confirmation No. : To Be Assigned

## INFORMATION DISCLOSURE STATEMENT

Director of the United States Patent and Trademark Office P.O. Box 1450 Alexandria, Virginia 22313-1450

Dear Sir:

The material listed on the accompanying forms PTO-1449 forms, from the parent application having U.S. Serial Number 10/238,607, is cited in compliance with the provisions of 37 C.F.R. §§ 1.56, 1.97 and 1.98. Applicant respectfully requests that the Examiner consider these references with respect to the present application. Copies of these references can be found with the parent application and, accordingly, will not be resubmitted unless requested by the Examiner.

Respectfully submitted,

Βv

Martha Cassidy Attorney for Applicants

Registration No. 44,0%6

ROTHWELL, FIGG, ERNST & MANBECK, p.c.

Suite 800, 1425 K Street, N.W.

Washington, D.C. 20005 Telephone: (202)783-6040

Enclosure(s):
PTO-1449 Forms

1954-435.ids.wpd

						_			Complete if K	nown			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT							Application Number			To Be Assigned			
							Filing Date			2003			
						irst N	ame	ed Inventor	Don J. DIAN	MOND			
							Art	Unit	1648				
	<u> </u>							Name	Ali Reza Sa	limi			
Sheet	1		of	7	Α	ttorne	y D	ocket Number	1954-435				
					U.S.	PAT	EN	T DOCUMENTS					
			U.S. Pat	ent Docume	ent		İ	Name of Date	antoo or Analia		Data of Dublication		
Examiner Initials*	Cite No.1		Numbe		nd C	ode² wn)			of Patentee or Applicant Date of Publication of Cited Documer MM-DD-YYY				
	A.	6,074,6	645				D	iamond et al.			06/13/00		
	B.	5,736,1	42				Sette et al.				04/07/98		
	C.	5,075,2	213			Pande et al.				12/24/91			
	D.	5,405,9	40				В	Boon et al.			04/11/95		
	E.	5,470,7	'30				Greenberg et al.				11/28/95		
				FO	REI	GN P	ATE	ENT DOCUMEN	TS				
			Foreign I	oreign Patent Document							Data of Dublication of		
Examiner Initials*	Cite No.1	Office <sup>3</sup> Code		Number⁴	Kind <sup>5</sup> (if known		ר)	Name of Patentee of Applicant of Cited Document			Date of Publication of Cited Document MM-DD-YYYY		
	F.	wo	99/19:	349				City of Hope		04	/22/99		
	G.	wo	97/40	165				The Wistar Insti and Biology	tute of Anatomy	/ 10	/30/97		
	H.	wo	00/75	180				Anmelder und			12/14/00		
	1.	wo	98/260	074				Institut National De La Sante Et De La Recherche Medicale			/18/98		
	J.	wo	94/00	150				City of Hope		01	/06/94		
	K.	wo	92/05	794				Immunex Corporation			/16/92		
	L. WO 96/06929						Fred Hutchinson Cancer Research Center		03	/07/96			
Examiner Signature									Date Considered				

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code. <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached. AB indicates that only an English language abstract is attached.

				<del></del>		Complete if Kı	nown				
					Application Number	To Be Assig	ned				
			SCLOS		Filing Date	October 31, 2003					
STATI	EMENT	r BY	APPLIC	TMA	First Named Inventor	or Don J. DIAMOND					
					Group Art Unit	1648					
					Examiner Name	Ali Reza Sal	imi				
Sheet	2		of	7	Attorney Docket Number	1954-435					
			OTHER F	PRIOR ART	- NON PATENT LITERATU	RE DOCUME	ENTS				
Examiner Initials*	Cite No.1				thor (in CAPITAL LETTERS), title o urnal, serial, symposium, catalog, e publisher, city and/or country w	tc.), date, page(s		T <sup>2</sup>			
	M.				NA, a Novel Immune Enhancer ( ne, 16:11/12:1216-1224, 1998.	for Systemic an	d Mucosal Immunization				
	N.				ent of High Potency Universal I DR-Blocking Peptides," <u>Immun</u>						
-	Ο.				Lymphocytes from HLA-A2 Tra " <u>J. Exp. Med.</u> 168:1157-1162,						
	P.	Immu	Berzofsky et al., "Construction of peptides Encompassing Multideterminant Clusters of Human Immunodeficiency Virus Envelope to Induce in Vitro T Cell Responses in Mice and Humans of Multiple MHC Types," The J. of Clinical Investigation 88:876-884, September 1991.								
	Q.			"Recognition 222:293-29	n of Human Cytomegalovirus G 6, 1996.	ene Products b	y HCMV-specific Cytotoxic T				
	R.	Prote	siewicz et ein and Gly ember 198	coprotein B	Frequency of Stage-specific C Expressed by Recombinant Va	TL Recognizing ccinia Viruses,	the 72-kD Immediate Early J. Exp. Med. 168:919-931,				
	S.				on of Unique and Shared T-Cel unotherapy 21(6):427-434, 1998		r Antigens in Human Renal				
	T.			The role of a s 52:501-509	nchor residues in the binding of 0, 1998.	peptides to HL	A-A*1101 molecules,"				
	U.	Clay Vacc 1999	ination wit	anges in the h a Peptide I	Fine Specificity of gp100 <sub>(209-217)</sub> Modified at an HLA-A2.1 Ancho	-Reactive T Cel r Residue," <u>J.</u>	lls in Patients Following of Immunology, 1749-1755,				
	V.	Greenberg et al. "Development of a treatment regimen for human cytomegalovirus (CMV) infection in bone marrow transplantation recipients by adoptive transfer of donor-derived CMV-specific T cell clones expanded <i>in vitro</i> " Annals of the New York Academy of Sciences 636:184-195, 1991.									
	W.	gB, p	p150, and	pp28 in Hea	ymphocyte (CTL) Responses to althy Individuals: Reevaluation of 1537-46, 2000.						
	X.				MHC Class I transgenic mice for ricted CTL epitopes" J. Immuno						
Examiner Signature			Date Considered whether or not citation is in conformance with MPER 609. Draw line through citation if not								

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

						Complete if K	nown				
INFORMATION DISCLOSURE					Application Number	To Be Assig	gned				
			ISCLOS APPLIC		Filing Date October 31, 2003						
51711	_1715_1	41 DI	ALLEIC	<b>7</b> 7101	First Named Inventor Don J. DIAMOND						
					Group Art Unit	Group Art Unit 1648					
					Examiner Name	Ali Reza Sa	limi	_			
Sheet	3		of	7	Attorney Docket Number	1954-435					
		<u> </u>	OTHER	PRIOR ART	- NON PATENT LITERATU	JRE DOCUMI	ENTS				
Examiner Initials*	Cite No.				thor (in CAPITAL LETTERS), title o urnal, serial, symposium, catalog, e publisher, city and/or country w	tc.), date, page(s		T <sup>6</sup>			
	Y.				3 T cell reactivity to cytomegalo des," <u>Eur. J. Immunol</u> . 30:1676		tein-spanning pools of				
	Z.	Keri Kilo	n et al., "Ta dalton Majo	rget Structur or Immediate	es of the CD8*-T Cell Response Early Protein Revisited," <u>J. of \</u>	e to Human Cy /irology 73(10)	tomegalovirus: the 72 :8179-8184, Oct. 1999.				
	AA.				neering Allows Cytotoxic T-cell \ https://mmunology.		ainst Human jPapilloma				
	BB.	infe	Livingston et al. "Altered helper T lymphocyte function associated with chronic hepatitis B virus infection and its role in response to therapeutic vaccination in humans" <u>J. Immunology</u> 162:3088-3095, 1999.								
	CC.				n of human monoclonal antiboo lovirus" <u>Clin. Exp. Immunol.</u> 84						
	DD.				ated HTL-CTL constructs prime 23-833, 1998.	for multiple HE	BV and HCV CTL eiptope				
	EE.	Pan MH	ina-Bordigr C class II a	non et al., "U	niversally immunogenic T cell e	pitopes: promis J. Immunol. 19	scuous binding to human 9:2237-2242, 1989.				
	FF.	Auto	Retiére et al., "Generation of Cytomegalovirus-Specific Human T-Lymphocyte Clones by Using Autologous B-Lymphoblastoid Cells with Stable Expression of pp65 or IE1 Proteins: a Tool to Study the Fine Specificity of the Antiviral Response," J. of Virology 74(9):3948-3952, May 2000.								
	GG.	cyto		s does not re	restricted cytotoxic T lymphocyt equire endogenous viral gene e						
	нн.				ure and transcription of the gene pp71 of human cytomegalovirus						
	11.		Schild et al., "Efficiency of peptides and lipopeptides for in vivo priming of virus-specific cytotoxic T cells," Eur. J. Immunol. 21:2649-2654, 1991.								
	JJ.		Theobald et al., "Targeting p53 as a general tumor antigen," <u>Proc. Natl. Acad. Sci. USA</u> 92:11993-11997, December 1995.								
	KK.			"Lipopeptide cine 17:675-	particles as the immunological 885, 1999.	ly active compo	onent of CTL inducing				
Examiner Signature						Date Considered					

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*Unique citation designation number. \*Applicant is to place a check mark here if English language Translation is attached.

					*	(	Complete if Kı	nown	<del>-</del>	
INFORMATION DISCLOSURE						Application Number	To Be Assig	ned		
						Filing Date	October 31,	2003		
F					ANI	First Named Inventor	MOND			
						Group Art Unit 1648				
						Examiner Name	Ali Reza Salimi			
Sheet	4			of	7	Attorney Docket Number	1954-435			
			(	OTHER I	PRIOR ART	- NON PATENT LITERATU	JRE DOCUME	ENTS		
Examiner Initials*	Cite		i			thor (in CAPITAL LETTERS), title o urnal, serial, symposium, catalog, e publisher, city and/or country w	etc.), date, page(s		T€	
	LL.		Papill		Type 16-Ind	ccination with an Anchor-Repla uced Tumors Expressing the W				
	ММ					es and similarities in the A2.1-r yte antigen-transgenic mice," <u>E</u>				
	NN.					duction of Primary, Antigen-Spe ed with Synthetic Peptides," <u>Mc</u>				
	00.	- 1	Quinnan et al., "HLA-Restricted T-Lymphocyte and Non-T-Lymphocyte Cytotoxic Responses Correlate with Recovery from Cytomegalovirus Infection in Bone-Marrow-Transplant Recipients," <u>The New England Journal of Medicine</u> 307(1): 7-13, 1982.							
	PP.					Cytomegalovirus-Specific Cytot icity," <u>Eur. J. Immunol.</u> 13:804-8		cytes: Requirements for in		
	QQ.					artial Chemical Characterizatio ournal of Virology 49(1):279-28		alton Glycoprotein of		
	RR.	1		onses Sin		lton Matrix Protein of Human Ce of Whole Viral Antigen", <u>The J</u>				
	SS.					for Cytomegalovirus Infection Ases 153(3):478-488, 1986.	After Human Ma	arrow Transplantation," The		
	π.			et al., "Re Spring Ha		diated Gene Transfer into Huma	an Skin Fibrobla	asts", March 1988 Meeting at		
	UU.	U. Borysiewicz et al., "Relative Frequency of Stage-Specific CTL Recognizing the 72-kD Immediate Protein and Glycoprotein B Expressed by Recombinant Vaccinia Viruses," <u>J. Exp. Med.</u> 168:919-1988.								
	VV.		Miller et al., "Design of Retrovirus Vectors for Transfer and Expression of the Human β-Globin G Journal of Virology 62(11):4337-4345, 1988.							
	ww				., "Recognition 323:527-533,	on of Influenza Virus Proteins by Cytotoxic T Lymphocytes", Phil. Trans. R. 1989.				
	XX.		Murin	e and Hu		xpression of the Human β-Glob poietic Cells", <u>Hemoglobin Swit</u> 1989.				
Examiner Signature							Date Considered			

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

						Complete if Kr	nown					
					Application Number	To Be Assig	ned					
	RMATI				Filing Date October 31, 2003							
STA	TEMEN.	I BY	APPLIC	ANI	First Named Inventor	nventor Don J. DIAMOND						
					Group Art Unit	1648						
					Examiner Name	Ali Reza Sal	limi					
Sheet	5		of	7	Attorney Docket Number	1954-435						
	<u> </u>		OTHER I	PRIOR ART	- NON PATENT LITERATI	JRE DOCUME	ENTS					
Examin er Initials*	Cite No.				thor (in CAPITAL LETTERS), title curnal, serial, symposium, catalog, epublisher, city and/or country w	etc.), date, page(s		Te				
	YY.	(Tow		fication of a	alysis of a 64-kDa Major Structo Phosphorylation Site and Comp			·				
	ZZ.			ele-Specific N ture 351:290	Notifs Revealed by Sequencing 1-296, 1991.	of Self-Peptide	s Eluted from MHC					
	AAA.	Pulm	Schmidt et al., "A Randomized, Controlled Trial of Prophylactic Ganciclovir for Cytomegalovirus Pulmonary Infection in Recipients of Allogeneic Bone Marrow Transplants", The New England Journal of Medicine, 324(15):1005-1011, 1991.									
	BBB.	Del Val et al., "Efficient Processing of an Antigenic Sequence for Presentation by MHC Class I Molecules Depends on Its Neighboring Residues in the Protein," Cell 68:1145-1153, 1991.										
	CCC.				ymphocytes Recognize an HLA en," <u>J. Exp. Med.</u> 174:1565-157		Epitope Within the Hepatitis					
	DDD.	Goodrich et al., "Early Treatment with Ganciclovir to Prevent Cytomegalovirus Disease After Allogenei Bone Marrow Transplantation," The New England Journal of Medicine 325(23):1601-1607, 1991.										
	EEE.	Reusser et al., "Cytotoxic T-Lymphocyte Response to Cytomegalovirus After Human Allogeneic Bone Marrow Transplantation: Pattern of Recovery and Correlation With Cytomegalovirus Infection and Disease," Blood 78(5):1373-1380, 1981.										
	FFF.	Riddell et al., "Restoration of Viral Immunity in Immunodeficient Humans by the Adoptive Transfer of T Cell Clones," <u>Science</u> 257:238-241, 1992.										
	GGG.	Missale et al., "HLA-A31 and HLA-Aw68-Restricted Cytotoxic T Cell Responses to a Single Hepatitis B Virus Nucleocapsid Epitope During Acute Viral Hepatitis", J. Exp. Med. 177:751-762, 1993.										
	ннн.	Gilbert et al., "Selective Interference with Class I Major Histocompatibility Complex Presentation of Major Immediate-Early Protein Following Infection with Human Cytomegalovirus," <u>Journal of Virolog</u> 67(6):3461-3469, 1993.										
	III.		Bertoletti et al., "Definition of a Minimal Optimal Cytotoxic T-Cell Epitope within the Hepatitis B Virus Nucleocapside Protein," <u>Journal of Virology</u> 67(4):2376-2380, 1993.									
	JJJ. Kast et al., "Human Leukocyte Antigen-A2.1 Restricted Candidate Cytotoxic T Lymphocyte Epitopes of Human Papillomavirus Type 16 E6 and E7 Proteins Identified by Using the Processing-Defective Human Cell Line T2," <u>Journal of Immunotherapy</u> 14:115-120, 1993.											
Examiner Signature					or not aitation is in conforman	Date Considered						

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1Unique citation designation number. 2Applicant is to place a check mark here if English language Translation is attached.

			,	<u></u>		Complete if Known	-			
INFORMATION DISCLOSURE					Application Number	To Be Assigned				
					Filing Date	October 31, 2003				
STA	TEMEN	IBY	APPLIC	ANI	First Named Inventor	Don J. DIAMOND				
					Group Art Unit	1648				
					Examiner Name	Ali Reza Salimi				
Sheet	6		of	7	Attorney Docket Number	1954-435				
			OTHER F	PRIOR ART	- NON PATENT LITERATU	IRE DOCUMENTS				
Exami ner Initials*	Cite No.					f the article (when appropriate), title of the tc.), date, page(s), volume-issue number(s), here published	T <sup>6</sup>			
	KKK.				Prophylaxis To Prevent Cytom nal Medicine 118:173-178, 199	egalovirus Disease after Allogeneic Marrow 3.				
	LLL.				Prophylaxis of Cytomegalovirus nts," <u>Annals of Internal Medicine</u>	Infection and Disease in Allogeneic Bone 118:179-184, 1993.				
	МММ.		Riddell et al., "Therapeutic Reconstitution of Human Viral Immunity by Adoptive Transfer of Cytotoxic Lymphocyte Clones," Current Topics in Microbiology and Immunology 189:9-34, 1994.							
	NNN.	Allog	Li et al., "Recovery of HLA-Restricted Cytomegalovirus (CMV)-Specific T-Cell Responses After Allogeneic Bone Marrow Transplant: Correlation with CMV Diseas and Effect of Ganciclovir Proophylaxis," Blood 83(7):1971-1979, 1994.							
	000.	Lymp 1) gp	hocyte Re	esponse to a ronegative F	Highly Conserved Region of Hu	nplex Class I-Restricted Cytotoxic T- uman Immunodeficiency Virus Type 1 (HIV- lidate HIV-1 Vaccine," <u>Journal of Virology</u>				
	PPP.			tential Role 11-394, 1994		l p53 Interaction in Coronary Restenosis,"				
	QQQ.	as a		igen for CD8		uman Cytomegalovirus Matrix Protein pp65 mphocytes," <u>Journal of Medical Virology</u>				
	RRR.		Vitiello et al., "Development of a Lipopeptide-based Therapeutic Vaccine to Treat Chronic HBV Infection," J. Clin. Invest. 95:341-349, 1995.							
	SSS.	Bone	Marrow b			Cytomegalovirus in Recipients of Allogeneic  'The New England Journal of Medicine				
	TTT.	Drijfh of Pe	out et al., ptides Usi	"Detailed Mo	tifs for Peptide Binding to HLA- Binding Assay," <u>Human Immu</u>	A*0201 Derived from Large Random Sets nology 43:1-12, 1995.	_			
	UUU.				r Program for Predicting Possib ding Motifs," <u>Human Immunolo</u>	lle Cytotoxic T Lymphocyte Epitopes Based gy 43:13-18, 1995.				
	VVV.			mmune Resp y 154:222-2		us Infection," <u>Current Topics in Microbiology</u>				
	WWW. Zhou et al., "Association Between Prior Cytomegalovirus Infection and the Risk of Restenosis After Coronary Atherectomy," The New England Journal of Medicine 335(9):624-630, 1996.									
Examine Signature	е		<del></del>			Date Considered e with MPEP 609 Draw line through citation if				

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

		-				Complete if K	nown			
INCORRATION DISCLOSURE					Application Number	To Be Assig	ned			
					Filing Date October 31, 2003					
STA	STATEMENT BY APPLICANT				First Named Inventor	Named Inventor Don J. DIAMOND				
					Group Art Unit 1648					
					Examiner Name	Ali Reza Sa	limi			
Sheet	7		of	7	Attorney Docket Number	1954-435				
			OTHER I	PRIOR ART	- NON PATENT LITERATI	JRE DOCUMI	ENTS			
Exami ner Initials*	Cite No.				thor (in CAPITAL LETTERS), title ournal, serial, symposium, catalog, epublisher, city and/or country w	etc.), date, page(s		T <sub>e</sub>		
	XXX.	Moss	, "Vaccini	a Virus Vecto	ors," Construction of Recombin	ant Viruses, pp.	345-362.			
	YYY.	pp65	(ppUL83)	of Human C	nmunization of Mice with Plasm Sytomegalovirus Induces High L <u>Infect Dis</u> 99:117-120, 1995.					
	ZZZ.	Prote	Khattab, B.A. et al., "Three T-Cell Epitopes Within the C-Terminal 265 Amino Acids of the Matrix Protein pp65 of Human Cytomegalovirus Recognized by Human Lymphocytes," <u>Journal of Medical Virology</u> 52:68-76, 1997.							
	AAAA.	Ogg,	Ogg, G.H. et al., "HLA-peptide tetrameric complexes," <u>Immunology</u> 10:393-396, 1998.							
	BBBB.				ytomegalovirus Strain Towne p ooli," <u>Virology</u> 182:220-228, 199		leotide Sequence and			
	CCCC.	Parke Bindi	er, K. et al ng of Indiv	., "Scheme f vidual Peptid	or Ranking Potential HLA-A2 B e Side-Chains," <u>Journal of Imm</u>	inding Peptides unology 152:16	Based on Independent 3-175, 1994.			
	DDDD.			al., "The hum ):7569-7579	an CTL response to Cytomega , 1996.	lovirus is domin	ated by structural protein," <u>J.</u>			
	EEEE.				ically identically HLA B35 allele CTL," <u>J. Cell. Biochem.</u> Vol. Su					
	FFFF.				o priming of virus-specific cytot <u>a</u> 342:561-564, 1989.	oxic T lymphocy	ytes with synthetic			
	GGGG.			n vivo priming re 342:561-5	g of virus-specific cytotoxic T ly 64, 1989.	mphocytes with	synthetic lipopeptide			
	нннн.	Gonczol E. et al., "Preclinical evaluation of an ALVAC (canarypox)-human cytomegalovirus glycoprotein B vaccine candidate," <u>Vaccine</u> 13(12):1080-1085, 1995.								
	IIII.	Ram	mensee e	t al., <u>Immuno</u>	ogenetics 41(4):178-228, 1995.					
	JJJJ.	Living	gston et al	l., <u>J. Immuno</u>	<u>I.</u> 159:1383-1392, 1997.		· · · · · · · · · · · · · · · · · · ·			
	Examiner Signature					Date Considered				

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1Unique citation designation number. 2Applicant is to place a check mark here if English language Translation is attached.